3919

Diag. Cht. No. 8201-2

Form 504
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: S.E. Alaska

11—5613

DESCRIPTIVE REPORT.

Hydrographic Sheet No. 3919

LOCALITY:

Eastern Passage
Southeastern
Alaska

1916

CHIEF OF PARTY:

L. O. Cobbut. asst

3919

Form 537
11—5812

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 3919

State . Alaska . . . . . .

General locality . Eastern Passage, SE Alaska . . . . . .

Locality . . . . . Between Pt Babbler and the Narrows . . .

Chief of party . . . L.O.Colbert . . . . . .

Surveyed by . . . . L.O.Colbert . . . . . .

Date of survey . . . Aug. 29 --. Aug. 31 1916 . . . . . .

Scale . . . . . 1/20,000 . . . . . .

Soundings in . . . . Feet . . . . . .

Plane of reference . Mean Lower Low Water . . . . . .

Protracted by N.P.W. . . . Soundings in pencil by . . . . .

Inked by . . . N.P.W. . . . Verified by A.L.Shalowitz . . .

Records accompanying sheet (check those forwarded):

Des. report, ------- Tide books, ------- Marigrams, ------- Boat sheets,

------- Sounding books, ------- Wire-drag books, ------- Photographs.

Data from other sources affecting sheet . . . . . .

Remarks:

Only the descriptive report is forwarded with the sheet, as the Drag records are held to be shipped later.

DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY

E. Lester Jones

Superintendent.

DESCRIPTIVE REPORT

to accompany

WIRE DRAG HYDROGRAPHIC SHEET No(7a) 3919

EASTERN PASSAGE

SOUTHEASTERN ALASKA

by

WIRE DRAG PARTY No. 4.

- 1916 -

L.O.Colbert, Assistant

Chief of Party

DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY

Descriptive report to accompany
Wire Drag Sheet No. 3919

of

EASTERN PASSAGE,

SOUTHEASTERN ALASKA.

Limits:-

This sheet comprises a complete drag survey of the area in Eastern Passage between Babbler Point and the Narrows. A drag with an effective length to stretch across the Narrows was used with each launch taking independent positions. Near the southern end of the Passage around Channel Island it was necessary to use a shorter drag

Depths Along Shore:-

It was attempted so far as practicable to keep the drag within 300 meters of the beach. This was accomplished in most cases except where the shoreline receded into deep bights, or where the soundings taken from the launches showed that going in too close would only mean grounding the end of the drag. Although in most cases the drag could be taken within a short distance of the beach there were frequent places where small boulder covered ledges extended short distances from shore, and great care had to be used in avoiding these. Then it was necessary to sound from both launches while dragging.

Effective Depth:-

With two exceptions the entire area was covered by a drag of 50 feet or over effective depth. In one case one end of the drag was hooked up with the least effective depth of 34 feet in order to run in as close as possible to a shoal discovered about a mile up the Passage from Point Madan. In another, one end of the drag was hooked up with a least effective depth of 39 feet, so as to be able to go in as close to Point Madan as possible.

Shoals:-

(1) On the east side of the Passage and about a mile and a half north of Point Madan, three rocks awash at mean lower low water were located by the plane table party, and these were plotted on the smooth sheet. These rocks are a portion of a rocky ledge extending out from shore. The drag with an effective depth of 40 feet went aground 150 meters out from the outermost of these rocks. Soundings were taken and a least depth of 40 feet was found 400 meters out from shore. This sounding no doubt was near the outer limits of the rocky ledge, which continued out from the rocks awash. ~~The drag~~

The drag was reversed, and with an effective least depth of 36 feet, was then run just outside the location of the above mentioned sounding.

(2) Off Point Madam a rocky ledge extends about 200 meters off shore in a southeasterly direction, true. The drag went aground here, and a rock with least depth of 14 feet was found 150 meters from shore. Later a drag with an effective depth of 50 feet cleared this point by 350 meters.

(3) At the extreme southern end of the Passage and in a East, northeasterly direction from a point at the west side of entrance to small bay, distance 175 meters, a least depth of 22 feet with rocky bottom was found. The entrance to this bay is sometimes used for anchorage, and it is well worth mentioning that there is a sudden rise from 15 fathoms to very shoal depths soon after entering the bay, both toward the head and toward the westerly point of the entrance, For this reason care must be exercised not to attempt going very far into the bay. The water is too deep for good anchorage. The same remarks apply to the indentation east of Point Madam.

Survey Methods:-

The tide reducers for this work were taken from the Wrangell gauge, established by Wire Drag Party No. 3.

The control for locating the positions of the drag were based on a tertiary triangulation scheme. Plane table determinations for some positions were also used. The triangulation and plane table work was done a few days previous to the drag survey.

Coast Pilot Notes:-

The main body of this area lies in deep water, and a steamer can safely run mid - channel courses from Point Babbler to the entrance to the Narrows and pass on either side of Channel Island.

Approved

A Joachimsen

Assistant, C. & G. Survey.

Compiler.

L. O. Colbert.

Assistant, C. & G. Survey.

Chief of Party.

STATISTICS

WIRE DRAG SHEET NO. 79

EASTERN PASSAGE SOUTHEAST ALASKA

Day	No angles	Miles	Retained Soundings
A	191	12	1
D	401	8.5	2
	592	20.5	3

Area 18 1/2 miles (statute)

ADDRESS
AST AND GEODETIC SURVEY
WASHINGTON, D. C.

REFER TO NO.

5-LAC

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

September 27, 1917.

Division of Hydrography and Topography:

Division of Charts:

Tidal reductions are approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET 3919

Eastern Passage, S. E. Alaska
L. O. Colbert in 1916.

Plane of reference is
Mean lower low water, reading
4.6 ft. on staff at Wrangell.

L. P. Shidy

Acting Chief, Section of
Tides and Currents.

April 18, 1921.

Verification of Hydrographic Sheet 3919.
By A. L. Shalowitz, Hydrographic & Topographic Draftsman.

The plotting of this sheet was carefully executed. The vast number of changes that had to be made on this sheet was due to the office corrections to the tide reducers. The records were well kept and conformed to the general instructions.

Near the southern end of Eastern Passage and about 200 meters from Δ Venus a very small split was disclosed. As it is so close to the limits of the drag it is hardly worth considering as a split.

In the descriptive report for this sheet certain depths are mentioned as being carried through certain places. These figures do not agree to the area & depth sheet on account of the changed tidal reducers which change the effective depths.

Alan L. Shalowitz
H & S Draftsman

E.P.E.

ADDRESS THE DIRECTOR
U.S. COAST AND GEODETIC SURVEY

AND REFER TO No. 9-MEM

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
WASHINGTON

SECTION OF FIELD RECORDS.

REPORT OF WIRE DRAG SHEET No. 3919.

Surveyed in 1916.

Chief of Party: L. O. Colbert.

Surveyed by: L. O. Colbert. Instructions dated Feb. 26, 1916.

Protracted and inked by N. P. White.

Verified and Area and Depth Sheet by A. L. Shalowitz.

1. The extent of the drag work satisfies the specific instructions.

2. No shoals were discovered within the limits of the drag work.

3. The overlaps are ample.

4. The area covered by this survey can be considered as complete and no further drag work will be necessary.

5. Reviewed by A. L. Shalowitz, June, 1922.